

## Table of Contents

**Chapter 15-08 Special Purpose and Overlay Districts**

15-08-01	<b>Special Purpose and Overlay Districts</b>	1
A.	<b>Purpose</b>	1
B.	<b>Duties of Community Development Department and Historic Preservation Commission</b>	1
C.	<b>Designation of Historic Areas, Districts, Landmark Sites, And Buildings of Historic Significance</b>	1
D.	<b>Designated Historic Resources</b>	2
E.	<b>Historic Development Guidelines</b>	3
F.	<b>Demolition of Designated Historic Resources</b>	4
15-08-03	<b>Sensitive Area Overlay Zone District</b>	4
A.	<b>Purpose</b>	4
B.	<b>Scope And Application</b>	5
C.	<b>Density And Lot Size</b>	6
D.	<b>Lot Coverage, Usable Land, Flag Lots and Trails Upon Hillsides</b>	6
E.	<b>Development Standards within the Sensitive Area Overlay Zone.</b>	7
F.	<b>Review And Approval Procedure</b>	13
15-08-04	<b>Flood Plain Overlay District</b>	17
A.	<b>Findings</b>	17
B.	<b>Purpose of Flood Plain Overlay District.</b>	17
C.	<b>Methods Of Reducing Flood Losses.</b>	17
D.	<b>Lands To Which This Ordinance Applies.</b>	18
E.	<b>Basis For Establishing The Areas Of Special Flood Hazard</b>	18
F.	<b>Compliance.</b>	18
G.	<b>Abrogation And Greater Restrictions.</b>	18
H.	<b>Interpretation</b>	18
I.	<b>Warning And Disclaimer Of Liability.</b>	18
J.	<b>Relationship Of Floodplain Regulations To Zones.</b>	19
K.	<b>Special Flood Hazard Area Approval.</b>	19
L.	<b>Responsibility Of The Community Development Director</b>	19
M.	<b>Interpretation of FIRM Boundaries.</b>	20
N.	<b>Appeals</b>	20
O.	<b>Floodways.</b>	22
P.	<b>Development Standards within Flood Plain Overlay District.</b>	22
Q.	<b>Jordan River Floodplain - Special Regulations</b>	25
15-08-05	<b>Drinking Water Source Protection Ordinance</b>	26
A.	<b>Title, Applicability and Authority.</b>	26
B.	<b>Purpose And Intent.</b>	26
C.	<b>Extent And Designation of Recharge Areas And Protection Zones</b>	27
D.	<b>Permitted Uses, Conditional Uses, And Prohibitions Within Recharge Areas And Protection Zones</b>	28
E.	<b>Management Strategies And Performance Standards.</b>	28

F.	<b>Table - Land Use Matrix for Potential Contamination Sources.</b>	31
G.	<b>Exclusions and Exemptions.</b>	35
H..	<b>Enforcement, Violation and Penalties</b>	35
I.	<b>Other.</b>	37
J.	<b>Liability.</b>	37
K.	<b>Administration.</b>	37
L.	<b>Exhibit 1. Generic Regulated Substance List</b>	38
M.	<b>Exhibit 2. (Map of Primary and Secondary Recharge Areas)</b>	39

**Chapter 15-08 Special Purpose and Overlay Districts****15-08-01 Special Purpose and Overlay Districts****15-08-02 Historic Resources**

A. **Purpose.** The purpose of this Section is to provide regulations for those areas, districts, sites, and buildings which have been designated as having significant character, interest, or value as part of the development, heritage, or cultural characteristics of Sandy City, the State of Utah, or the Nation.

**B. Duties of Community Development Department and Historic Preservation Commission**

1. Community Development Department. The **Community Development Department** of Sandy City is hereby charged with the administration and enforcement of the provisions of this chapter of the ordinance.
2. Sandy City Historic Preservation Commission. The **Sandy City Historic Preservation Commission**, hereinafter Historic Commission, has been established to advise the City and to aid property owners in maintaining and enhancing the worthwhile historical resources of Sandy City. The duties of the Historic Commission are as follows:
  - a. To advise the Planning Commission and the City Council on the designation of Historic Areas, Districts, Landmark Sites and Buildings of Historic Significance;
  - b. To advise the Planning Commission and City Council on matters pertaining to Historic Resources;
  - c. To advise the Planning Commission on guidelines for rehabilitation and new construction pertaining to Historic Resources; and,
  - d. To aid property owners in maintaining and enhancing their properties in a manner consistent with adopted or otherwise established guidelines.

**C. Designation of Historic Areas, Districts, Landmark Sites, And Buildings of Historic Significance**

1. Qualification for Designation. An area, neighborhood, or district may be designated as a **Historic Area or Historic District**; and any site, natural feature, structure, or building, may be designated as a **Landmark Site or Building of Historic Significance**, if it has significant character, interest, or value as part of the development, heritage, or cultural characteristics of Sandy City, the State of Utah, or the Nation; and if it falls into one or more of the following categories:
  - a. Historical Significance
    1. It is the location of, or is associated in a significant way with a historic event which had a significant effect upon the City, State, or Nation; or,
    2. It is associated in a significant way with the life of a person important in the history of the City, State, or Nation; or,

3. It is associated in a significant way with an important aspect of the cultural, political, or economic heritage of the community, City, State or Nation.
  - b. Architectural Significance
    1. It embodies the distinctive visible characteristics of an architectural style, period, or a method of construction; or,
    2. It is an outstanding work of a designer or builder; or,
    3. It contains elements of extraordinary or unusual architectural or structural design, detail, use of materials, or craftsmanship; or,
    4. It portrays the environment of a group of people in an era of history characterized by a distinctive architectural style.
  - c. Historic Area Significance. Because of its prominent location, contrasts of siting, age, or scale, it is an easily identifiable visual feature of the City, and contributed to the distinctive quality or identity of the City.
2. Procedure for Designation.
- a. Any person, group, or association may nominate a prospective area, district, site or building for formal designation and inclusion in the **Sandy Historic Registry**.
  - b. The Historic Commission shall review the nomination and make recommendations to the City Council. Any nomination regarding the creation of a historic area or district shall also require a review and recommendation by the Planning Commission.
  - c. Prior to an action by the City Council, a public hearing shall be held, notice of which shall be published and mailed to owners of the property proposed to be so designated [at least five, but not more than fifteen days], prior to the date of the hearing.
  - d. Following a determination of formal designation by the City Council, notice of the determination shall be mailed to the owners of property affected by the designation, together with a copy of this chapter and any pertinent development guidelines. Such designation shall also be entered in the **Sandy Historic Registry**.

#### D. Designated Historic Resources

1. Historic Areas are relatively large areas which are generally distinguished by, but not limited to, a common development, heritage or cultural characteristic. Likely, they are synonymous with a particular neighborhood. A Historic Area may contain one or more Historic Districts within its boundaries, and will likely contain several Landmark Sites and Buildings of Historic Significance. Those areas within Sandy City which have been designated as Historic Areas are as follows:
  - a. **Historic Sandy Neighborhood**
    1. **Boundaries.** The Historic Sandy Neighborhood is that area bounded by 9000 South on the South; State Street on the West; 8400 South and its westward extension on the North; and, 700 East on the East. The boundaries of the neighborhood shall also include the

commercially zoned area on the west side of State Street, between 8640 and 8900 South.

2. **Purpose.** The Historic Sandy Neighborhood encompasses the major part of the original townsite of Sandy City and contains a significant inventory of older and unique architectural styles. Lot and block sizes in this area are also characteristic of nineteenth century Utah townsites, with Historic and other older dwellings which often do not conform to current development standards. The purpose of the Design Guidelines as they pertain to the Historic Sandy Neighborhood is to:
  - a. Preserve buildings and related structures of historic and architectural significance;
  - b. Allow improvements to existing structures or new construction to be conducted without conflict and without eroding the scale and historic character of the neighborhood; and,
  - c. Preserve and enhance entry ways into the Historic Sandy Neighborhood through design and streetscape standards, where appropriate.
2. Historic Districts are generally smaller and more distinctive than Historic Areas. Historic Districts will likely contain several Landmark Sites and Buildings of Historic Significance. Those areas within Sandy City which have been designated as Historic Districts are as follows:
  - a. -- No Historic Districts are currently designated --
3. Landmark Sites and Buildings of Historic Significance are distinctive individual sites. Designated sites and buildings are as listed in the **Sandy Historic Registry**.

#### E. Historic Development Guidelines

1. Establishment of Guidelines. Guidelines for exterior design criteria shall be adopted by the Planning Commission upon the recommendation of the Historic Commission, to aid applicants in formulating plans for development or redevelopment relating to designated Historic Resources.
2. Application of Guidelines. The guidelines shall apply to the following instances:
  - a. All rehabilitation, restoration, or reconstruction of, or addition to the exterior of any improvement which constitutes all or part of a **Historic Area, Historic District, Landmark Site** or a **Building of Historic Significance**;
  - b. A demolition or relocation of any improvement which is all or part of a building within a **Historic Area, Historic District, Landmark Site** or a **Building of Historic Significance**;
  - c. New construction within a **Historic Area** or **District**, upon any **Landmark Site** or on the property associated with a **Building of Historic Significance**;
  - d. Any signs placed on any building within a **Historic Area** or **District**, upon any **Landmark Site**, or on the property associated with any **Building of Historic Significance**;
  - e. Any fences, walls, and major landscaping elements within a **Historic Area** or **District**, on a **Landmark Site**, or on the property associated with a **Building of Historic Significance**.

3. Compliance with Guidelines. Compliance with the adopted guidelines by any property owner shall be voluntary except in the case where a "Contract of Compliance" has been agreed to by the property owner of a building or site within a designated **Historic District**, of a **Landmark Site**, or of a **Building of Historic Significance**.

#### F. Demolition of Designated Historic Resources

1. When any application is made for a demolition permit for a building within a **Historic Area or District**, or a **Building of Historical Significance**, the Community Development Department may delay approval of the demolition for a period of **up to 30 days**, in order to:
  - a. Make a historical record, both written (history, floor plans and elevations) and photographic, of the structure and site.
  - b. Review the condition of the building to determine the impact of the demolition to the neighborhood, and the technical feasibility of preservation of the structure.
  - c. Allow the Historic Commission to consider and make recommendations regarding the application.
  - d. Make the owner aware of economic incentives available to rehabilitate historic resources.
  - e. Encourage the property owner not to demolish the building until an attempt can be made to locate either suitable tenants to make the building economically viable again or to find a purchaser who is willing to acquire and rehabilitate the structure.
2. Upon findings of fact by the Historic Commission that preservation of the building is warranted and in the best interest of the City, the permit may be delayed for an additional 30 day period in order to find funding or other means to compensate the applicant for purchase of the building or for its preservation.
3. A third 30 day delay may be instituted by the City Council upon a recommendation from the Historic Commission.

#### 15-08-03 Sensitive Area Overlay Zone District

- A. **Purpose.** This Section shall provide standards, guidelines and criteria having the effect of minimizing flooding, erosion and other environmental hazards and protecting the natural scenic character of the hillside areas and ensuring the efficient expenditure of public funds.

The standards, guidelines and criteria established by this Section shall include, but shall not be limited to, the following:

1. The protection of the public from natural hazards of storm water runoff and erosion by requiring drainage facilities and the minimal removal of natural vegetation.
2. The minimization of the threat and consequential damages of fire in hillside areas by establishing fire protection measures.
3. The preservation of natural features, wildlife habitat and open space.

4. The preservation of public access to mountain areas and natural drainage channels.
5. The retention of natural topographic features such as drainage channels, streams, ridge lines, rock outcroppings, vistas, trees and other natural plant formations.
6. The preservation and enhancement of visual and environmental quality by use of natural vegetation and the prohibition of any excessive excavation and any terracing.
7. The assurance of an adequate transportation system for the total hillside area to include consideration of the approved Master Street Plan of the City. This system design will consider densities and topography with minimal cuts, fills or other visible scars.
8. The establishment of on-site and off-site traffic facilities that ensure ingress and egress for vehicles including emergency vehicles into all developed areas at any time.
9. The encouragement of a variety of development designs and concepts that are compatible with the natural terrain of the sensitive areas and will preserve open space and natural landscape.
10. The establishment of land use management criteria that will encourage protection of natural elements while allowing a harmonious and satisfying residential environment.
11. The encouragement of location, design and development of building sites to provide maximum safety and human enjoyment while adapting the development to the best use of the natural terrain.
12. The encouragement of the use of creative design teams composed of professional landscape architects, engineers and others.
13. The encouragement of a regard for the view of the hillsides as well as a view from the hillsides.

## **B. Scope And Application**

1. Jurisdiction of Sensitive Area Overlay Zone. The provisions of this Chapter shall apply to all lands in the City which lie within the area designated as the "Sandy City Sensitive Area Overlay Zone". Said map is attached hereto and incorporated herein by reference. At least three copies of the map drawn to scale of 1" = 1,000' are on file at the office of the City Recorder of Sandy City. Regulations of this chapter may apply to an area outside of the mapped Overlay Zone if the Director determines that the environmental conditions of the subject area qualify it as a sensitive area, and shall thereafter be amended to include such area in the Sensitive Area Overlay Zone.

All approved subdivision plats that lie within the area designated as the "Sensitive Area Overlay Zone" shall be recorded and shown on the lots.

2. Effect of Provisions. This Chapter makes additional provisions to those set forth elsewhere in Title 15 of the Revised Ordinances of Sandy City, Utah as amended. In the event of conflict between such additional provisions and the provisions of this Chapter, the more restrictive provisions shall apply.
3. Reserved
4. Determination of Anomalies for Slopes in excess of 30%. The Sandy City Engineer shall review all requests for development to determine the existence of an anomaly. If an anomaly is determined to

exist, the City Engineer shall forward to the Planning Commission a recommendation for development of the area affected by the anomaly. The recommendation will be made as part of the comprehensive review of the entire project. The City Engineer shall consult the Engineering Division Policy Manual prior to making a recommendation.

- C. **Density And Lot Size.** Residential densities, lot sizes, and PUDs allowed within the Sensitive Area Overlay Zone shall be the same as that allowed by the underlying zone.

D. **Lot Coverage, Usable Land, Flag Lots and Trails Upon Hillsides**

1. Maximum Impervious Material Coverage. The maximum impervious material coverage that shall be allowed upon lots:
  - a. upon which single family dwelling units are located for lots less than 20,000 square feet shall be 30 percent of the total lot area or 5,000 square feet, whichever is smaller, including dwelling units, accessory buildings, patios, and driveways; provided, however, that the maximum impervious material coverage may exceed 30 percent or 5,000 square feet upon review and approval by the Board of Adjustment.
  - b. upon which single family dwelling units are located for lots sizes 20,000 square feet and greater shall be 15,000 square feet, including dwelling units, accessory buildings, patios, and driveways; provided, however, that the maximum impervious material coverage may exceed 15,000 square feet upon review and approval by the Board of Adjustment. The Board of Adjustment shall use as criteria when making decision to increase lot coverage the following:
    1. The home is of comparable size to homes in general vicinity.
    2. Increase is needed to create a safe drive access for home.
    3. Increase is the minimum required to meet sub a and sub b above.
  - c. for multi-family dwellings, commercial, industrial, institutional, and accessory structures shall be determined during site plan review, and approved by the Planning Commission.
2. Usable Land. Single family dwelling structures shall be located only upon areas constituting usable land, which area shall be fully contiguous and shall be at least 5,000 square feet in size, and shall have a minimum dimension, either length or width, of 50 feet.
  - a. Location of a dwelling structure shall not be within an average of 20 feet (no point being closer than 10 feet) of a continuous hillside slope (upslope or downslope) of 30% or greater. The Engineering Department may require greater setbacks from the slopes based on unusual circumstances.
  - b. Single family dwelling structures shall be set back no further than 250 feet from a public or private street.
  - c. All other buildings, including clustered single family, multi-family, commercial, industrial, institutional, and accessory structures shall be located upon usable land, as may be determined through site plan review.

3. Flag Lots - Dimensions. In order to encourage the more efficient use of land, flag or L-shaped lots may be allowed subject to the conditions specified in §15-06-03(W).
4. Trails Upon Hillsides. A trail may be constructed to access upper/lower portions of residential property subject to the following conditions:
  - a. That no cut or fill of the hillside be in excess of two [2] feet. All cuts or fills shall be properly retained.
  - b. That the trail follow a meandering course, and not use a direct line pathway to the desired location. Where possible, the trail should follow the natural contours of the hillside.
  - c. That the trail be heavily landscaped with native materials.
  - d. That prior to construction and/or hillside cuts, the trail plan be submitted to the Community Development Department Director and City Engineer for review and approval.
  - e. The property owner may appeal any conditions placed upon the approval, or the denial of the request to the Planning Commission.

**E. Development Standards within the Sensitive Area Overlay Zone.**

1. Scope. It is intended by this Section that the development standards and provisions, as set forth herein, shall be required in connection with all building and construction in the Sandy City Sensitive Area Overlay Zone.
2. The Community Development Department may approve building permits for subdivision lots that were platted in Salt Lake County then annexed into Sandy City and subdivision lots platted in Sandy City prior to the adoption of the current Sensitive Area Overlay Zone. Staff shall use those Sensitive Area regulations in effect at the time the subdivision was platted to determine setback distances from areas of 30% slope. Those subdivision lots recorded prior to July 23, 1987 have no required setback from 30% slope. The following information shall be submitted to the Planning Office before City Staff may approve a building permit:
  - a. Submittal by the applicant of a geotechnical report that would establish the following:
    1. The depth of virgin soil below grade; and
    2. Soil compaction and stability; and
    3. Rock fall and debris flow potential.
  - b. Submittal by the applicant of a plot plan to include the following information:
    1. Home location; and
    2. Contour lines at two-foot interval; and
    3. Retaining walls, if determined necessary by the Sandy City Engineering; and
    4. Vegetation types and locations.

- c. The plot plan shall be accompanied by a cross-section showing the information required in subsection "b" above and driveway slope and slope percentage for each change in slope.
  - d. All requirements of the current Development Code such as driveway slopes and cuts and fills shall remain in force. Any deviation from these requirements shall have to be approved for a variance by the Board of Adjustment.
3. The Planning Commission, after review and recommendations from the Community Development Department and City Engineer as to compliance with the Purpose of this District [15-08-03(A)] may approve development upon land which is within a Sensitive Area on which construction or earthwork occurred legally prior to the adoption of the current Sensitive Area Overlay Zone without the required setback from the slope including land containing 30% or more slope. The developer bears the burden of proof to show that any previous construction or earthwork was legal. In addition to the submittals required for conceptual, preliminary and final review, the developer must complete the following:
- a. Submit proof of prior approval of subdivision, construction or earthwork, either in City or County, including copies of any and all permits, dates thereof and sensitive area or hillside regulations in effect at the time of the approval or permit.
  - b. Comply with all requirements of the current Development Code, such as driveway slopes and cuts and fills, maximum impervious coverage, etc. Any deviation from these requirements shall have to be approved for a variance by the Board of Adjustment.
  - c. The Development must proceed through the conceptual, preliminary and final review as set forth hereafter and may only be approved if it is found to be in compliance with the purpose of this chapter; is designed to comply, as closely as possible, with the setback, usable area and building limitations on 30% slope; and is to be constructed in such a way as to ensure the safety of the development and all adjoining properties.
  - d. Additional bonding and insurance may be required to ensure the safety of the site and all adjoining or affected properties both during construction and after completion of the project.
4. Drainage and Erosion. The area of the watershed shall be used to determine the amount of storm water runoff generated before and after construction.
- a. The "Rational Method" or other method as approved by the City Engineer shall be used in computing runoff. The basic formula for the "Rational Method" is:
    - Q = CIA in which:
    - Q = Runoff in cubic feet per second (c.f.s.)
    - C = Coefficient of runoff or the portion of storm water runs off a given area.

The following ranges for C value are typical examples. The actual C value used shall be approved by the City Engineer.

Type of Development	Runoff Coefficient
Industrial & Commercial	.80 - .90

Residential	.30 - .40
Parks	.15 - .24
Agricultural	.10 - .20

I = Average rainfall intensity during time of concentration for 25 year return period in inches per hour. The time of concentration shall be defined as the time required for water to flow from the most remote point of the section under consideration.

A = Drainage area in acres.

- b. Lots shall be arranged so as to ensure adequate setbacks from drainage channels. The 100 year storm shall be that basis for calculating setbacks. No structures shall be allowed in the 100 year flood plain.
- c. Facilities for the collection of storm water runoff shall be required to be constructed on development sites and according to the following requirements.
  1. Such facilities shall be the first improvement or facilities constructed on the development site, with the exception of sewer and water lines.
  2. Such facilities shall be designed so as to detain safely and adequately the maximum expected storm water runoff for a twenty-five year storm, not to exceed .2 cubic feet per second per acre or at a low rate or at a rate not higher than the flow rate before construction, whichever is less, on the development site, for a sufficient length of time so as to prevent flooding and erosion during storm water runoff flow periods.
  3. Such facilities shall be so designed as to divert surface water away from cut faces or sloping surfaces of a fill.
  4. The existing natural drainage system will be utilized, as much as possible, in its unimproved state.
  5. Where drainage channels are required, wide shallow swales lined with appropriate vegetation shall be used instead of cutting narrow, deep drainage ditches.
  6. Flow retarding devices, such as detention ponds and recharge berms, shall be used where practical to minimize increases in runoff volume and peak flow rate due to development. Areas which have shallow or perched groundwater or areas that are unstable must be given additional consideration.
- d. Construction on the development site shall be of a nature that will minimize the disturbance of vegetation cover, especially between December 1 and April 15 of the following year.
- e. Erosion control measures on the development site shall be required to minimize the increased solids loading in runoff from such areas. The detailed design system to control storm water erosion during and after construction shall be contained in the Grading and Drainage Report described in this Title.

#### 4. Vegetation and Revegetation.

- a. All areas on development sites cleared of natural vegetation in the course of construction of off-site improvements shall be replanted with revegetation which has good erosion control characteristics.
- b. New planting shall be protected with mulch material and fertilized in conjunction with the planting and watering schedule described in (5) below.
- c. The use of persons or firms having expertise in the practice of revegetation (i.e., licensed landscape architects or nurserymen) shall supervise the planting and installation of revegetation cover.
- d. Vegetation shall be removed only when absolutely necessary, e.g., for the construction of buildings, roads and filled areas.
- e. After the completion of off-site improvements vegetation shall be planted in all disturbed areas only during the following time periods:
  1. March 15 through May 15; and
  2. September 15 through October 31.
  3. If irrigated, planting may be done during summer months.
  4. Such vegetation shall be a mixture of plant materials; i.e., trees, shrubs, grass, and forbs. Native plant materials are preferred.
- f. No vegetation shall be removed on a continuous hillside, crest (upslope or downslope) or a slope 30% or greater unless otherwise determined by the Planning Commission upon recommendation of the Engineering Department for uses such as trails and open space improvements. Any revegetation of such a hillside shall have the approval of the Engineering Department.
- g. Topsoil removed during construction shall be conserved for later use on areas requiring vegetation or landscaping; i.e., cut and fill slopes.
- h. All disturbed soil surfaces shall be stabilized or covered prior to the first day of November. If the planned impervious surfaces (i.e., road, driveways, etc.) cannot be established prior to November 1st, a temporary treatment adequate to prevent erosion shall be installed on those surfaces.
- i. The property owner and/or developer shall be fully responsible for any destruction of native or applied vegetation identified as necessary for retention and shall be responsible for such destroyed vegetation. They shall carry the responsibility both for employees and subcontractors from the first day of construction until the final acceptance of improvements. The property owner and developer shall replace all destroyed vegetation with varieties of vegetation approved by the Planning Commission. The property owner shall assume co-responsibility with the developer upon purchase of the lot.

5. Geology.

- a. No structures shall be built on any zones of deformation with respect to active faults that the City has identified. Off-site improvement design will be approved by the Planning Commission.

- b. No structures or off-site improvements shall be allowed on any active landslide area.
- c. Problems associated with development on or near perched ground water and shallow ground water must be mitigated in a manner as approved by the Planning Commission.
- d. No structures shall be allowed in any rockfall zone. Off-site improvements may be allowed through special approval by the Planning Commission.

6. Fire Protection.

- a. Areas without a recognized water supply shall meet special requirements, on an individual basis, as established by the Planning Commission.
- b. Each development site and building permit for private lots, flag lots, and lots where the front setback is greater than 50 feet, shall be reviewed by the City Fire Department to see that it complies with the Uniform Fire Code, Section 13.208 Access Roadways for Fire Apparatus.
- c. Spark arresters shall be installed in every fireplace constructed indoor or outdoor. Screen openings in such arresters shall not be in excess of 1/4 inch diameter.
- d. Development adjacent to public lands shall provide access for fire protection vehicles and equipment.

7. Grading, Cuts and Fill.

- a. Exposed unstable surfaces of an excavation or fill shall not be steeper than one vertical to two horizontal.
- b. All permanent fill shall be located so that settlements, slidings, or erosions shall not damage or cover streets, curbs, gutters, sidewalks or buildings.
- c. The top and bottom edges of slopes caused by an excavation or fill up to 10 vertical feet shall be at 3 horizontal feet from the property line or public right-of-way lines.
- d. The maximum vertical height of all cuts or fills shall be 10 feet. Under exceptional circumstances, the Planning Commission may approve cuts or fills in excess of ten (10) feet with recommendation of the Engineering Department. The burden of demonstrating exceptional circumstances shall be on the developer of the property under consideration. Cuts or fills shall be measured from natural grade to finished grade.
- e. All structures, except retaining walls or soil stabilization improvements, shall have a setback from the crest of the fill or base of the cut of a minimum distance equal to the depth of the fill or the height of the cut, unless a structurally sound retaining wall is built for the cut or fill slope. Retaining walls may be a part of the dwelling unit.
- f. No grading, cuts, fills, or terracing will be allowed on a continuous hillside, crest (upslope or downslope) or a slope of 30% or greater unless otherwise determined by the Planning Commission upon recommendation of the Engineering Department.

8. Streets and Ways. Streets, roadways and private access ways shall follow as nearly as possible the natural terrain. The following additional standards shall apply:
- f. At least one ingress and one egress routes shall be provided for each subdivision or PUD project, unless there is a crash gate or the extension of a future stub street that will provide additional access.
  - g. Points of access shall be provided to all developed and nondeveloped areas for emergency and fire fighting equipment. Driveways located upon each lot extending from a public or private street shall have sufficient width and design to admit and accommodate fire fighting equipment (comply with all City Engineering Standards).
  - h. Cul-de-sacs shall not exceed 600 feet in length and shall have a turnaround with a back of curb line radius of at least 55 feet. Stub-streets that are longer than the width or length of any adjacent single lot or 200 feet, whichever is less, shall have a temporary turnaround at the end thereof.
  - i. Centerline curvatures shall not be less than a 100 foot radius on any curved street pattern.
  - j. Variations of the street design standards developed to solve special hillside visual and functional problems may be presented to the Planning Commission for consideration and approval. Examples of such variations may be the use of split roadways to avoid deep cuts, one-way streets, modifications of surface drainage treatments, sidewalk design, or the extension of a cul-de-sac.
  - k. Development sites which are located near canyon trails will provide access to those trails. Parking areas may be required by the Planning Commission at trail heads.
  - l. Developments adjacent to public lands shall provide for access by fire protection equipment.
  - m. The maximum amount of impervious surface for streets and roadways shall be 20 percent of the entire development site.
  - n. All streets or rights-of-way for vehicular traffic shall be subject to the following limitations:
    - 1. The maximum grade of such streets or rights-of-way shall be 12 percent except as hereafter provided.
    - 2. The Mayor, after receiving a recommendation from the Planning Commission, may grant approval for the construction of such streets or rights-of-way having a grade exceeding 12 percent, but the grade of such streets shall not, in any event, exceed 15 percent.
    - 3. The provisions for subsection (g) shall not apply to streets or rights-of-way already constructed or which have heretofore been granted preliminary approval by the Planning Commission.
    - 4. Roads shall be designed to meet the City road base, asphalt and compaction standards.
9. Architectural Design.
- a. Buildings proposed for construction in hillside or canyon areas within the Sandy City Sensitive Area Zone shall be designed to be visually compatible with the natural beauty of the hillsides and canyons. The use of building materials in colors that will blend harmoniously with the natural

- settings are encouraged. Such materials as natural woods, brick (earth colors) and stone are considered to be most appropriate.
- b. The Planning Commission shall review the design and specified exterior materials and colors for all structures other than single family dwellings. Building permits for such structures shall not be granted until building materials and colors have been approved by the Planning Commission.
  - c. Innovative designs for single family dwelling units; e.g., earth-sheltered dwellings with grass roofs, etc., may be allowed after approval by the Planning Commission and Building and Safety Department.
10. On-site Development. The property owner shall be fully responsible for making all improvements in accordance with the development site approval; e.g., drainage, erosion and vegetation constraints.
11. Bond. In addition to the provisions requiring the posting of a bond as set forth elsewhere in the ordinances of Sandy City, the property owner may be required by the Director to guarantee the completion of revegetation projects, the stabilization of grading sites, cuts and fill and construction of storm water runoff facilities.
12. Fencing. All fences located on slopes of thirty percent (30%) or greater shall be dark brown or black vinyl coated chain link to blend in with the native landscaping. In no case shall the following types of fences be allowed: uncoated chain link, masonry, block, wood, or other sight obscuring material. Fence construction shall comply with the Hillside Element as contained in Section VIII of the General Plan.
13. The Planning Commission, after review and recommendations from the Community Development Department and City Engineer as to compliance with the Purpose of this District (15-08-03(A)) may approve development upon land which is within a Sensitive Area on which construction or earthwork occurred legally prior to the adoption of the current Sensitive Area Overlay Zone without the required setback from the slope including land containing 30% or more slope. The developer bears the burden of proof to show that any previous construction or earthwork was legal. In addition to the submittals required for conceptual, preliminary and final review, the developer must complete the following:
- a. Submit proof of prior approval of subdivision, construction or earthwork, either in City or County, including copies of any and all permits, dates thereof and sensitive area or hillside regulations in effect at the time of the approval or permit.
  - b. Comply with all requirements of the current Development Code, such as driveway slopes and cuts and fills, maximum impervious coverage etc. Any deviation from these requirements shall have to be approved for a variance by the Board of Adjustment.
  - c. The Development must proceed through the conceptual, preliminary and final reviews as set forth hereafter and may only be approved if it is found to be in compliance with the purpose of this chapter; is designed to comply, as closely as possible, with the setback, usable area and building limitations on 30% slope; and is to be constructed in such a way as to ensure the safety of the development and all adjoining properties.
  - d. Additional bonding and insurance may be required to ensure the safety of the site and all adjoining or affected properties both during construction and after completion of the project

**F. Review And Approval Procedure**

1. Review Process Standards. As an application is reviewed by the Planning Commission and Mayor, the findings of fact shall be listed and included in all application approvals or denials. The decision along with the findings of fact shall be forwarded to the applicant within 15 days of any action.
2. Approval by the Mayor. Before a planned unit development, a cluster subdivision, a subdivision, or a commercial development is allowed within the Sandy Sensitive Area Zone, approval must be first granted by the Mayor.
3. Before construction of a single-family dwelling on an individual lot not included as part of a development site or approved subdivision shall be allowed, approval must first be granted by the Planning Commission, in compliance with this Section. The application shall contain information, plans and reports as are required by the Planning Commission.
4. Application to Planning Commission. All applications as required in this Section, shall first be submitted to the Planning Commission for its consideration and recommendations. All site plans and/or reports as required in this Section shall be drawn to scale, not smaller than 1" = 100' and shall show topography at 5 foot intervals. With respect to site plans and/or reports drawn to scale of 1" = 50', said site plans and/or reports shall show topographical contours at two foot intervals.
5. Engineering Calculations Made Available to the City. All engineering calculations performed and acquired pursuant to the provisions of the ordinances of Sandy City shall be made available to the Sandy City Engineer as a part of the review and approval process. The Sandy City Engineer shall then have access to the said engineering calculations in order to better advise the Planning Commission and Mayor with regard to further review and approval of a proposed development.
6. Conceptual Review. Conceptual review of development within Sensitive Land areas is intended to be a coping process wherein development concerns and potential environmental hazards are evaluated. Additional information, studies, and reports may be required for preliminary approval under subsection (g), as may be determined by the Planning Commission. Conceptual Review by the Planning Commission does not presume any kind of approval or development right for the proposed project, in whole or in part. Only by the submission and review of the required reports for preliminary approval can development potential be ascertained. Steps within the approval process may be combined for projects within Sensitive Land area when they are more routine in nature and only when so approved by the Planning Commission.
  - a. Planned Unit Developments, Subdivisions and Commercial Developments. All applications for development shall comply with the provisions of the ordinances of Sandy City. Conceptual approval must first be completed prior to application for preliminary approval. All applications for such review shall be accompanied by a plan drawn to scale. Applications for commercial developments shall be approved by a registered architect or engineer licensed to practice in the State of Utah.
  - b. Site Plans. Site plans shall include, in addition to the above provisions, the following:
    1. A topographic contour map, tied to a land base survey, showing areas within the development site with slopes of less than 10 percent, areas between 10 and 20 percent, areas between 21 and 30 percent, and areas of greater than 30 percent.
    2. Location of the proposed planned unit development, subdivisions, cluster subdivision, or

- commercial development, in relation to abutting public streets;
3. The total acreage, number of lots and proposed total density and slope and slope district density for residential developments;
  4. The location and approximate size of the proposed lots;
  5. A general street location, width, and grade of all proposed streets and radii of any cul-de-sacs;
  6. Location of existing or proposed schools, churches, or parks;
  7. Location of known hazards (i.e., faults, drainages, rockfall, etc.) and the boundaries of the 100 year flood plain;
  8. Soil type and general description;
  9. Land use data; i.e., the amount of residential land, transportation land, etc., by acreage and percent;
- c. The Planning Commission shall consider said applications for planned unit developments, subdivisions, or commercial developments, and shall forward their findings to the Mayor for his review. If the Planning Commission has a positive evaluation of the conceptual submittal they may allow the application to proceed with such conditions as may be deemed necessary to secure the purposes as set forth in this chapter.
- d. After receiving findings by the Planning Commission, the Mayor may also make a determination as to whether or not the application should be allowed to proceed.
7. Preliminary Approval. In addition to the information as required for preliminary approval for planned unit developments, cluster subdivisions, subdivisions, or commercial developments, in accordance with the ordinances of Sandy City, as the case may be, such additional information as set forth in this subsection may be required for developments in the Sensitive Area Overlay Zone. All reports as submitted herein shall be prepared by persons or firms licensed to practice their specialty or expertise in the State of Utah, if such license for practice is required, or by one having demonstrable expertise in such field of practice.
- a. Soil Characteristics Report. Data regarding the nature, distribution and strength of soils within the project area; the soil report shall include:
    1. Unified classification of all solid soils with liquid limit, shrink-swell potential and general suitability for development.
    2. Estimate of the normal highest elevation of the seasonal high water table.
    3. Flood history and potential; proximity to known flood plain areas and drainage channels.
    4. Topographic contours.
  - b. Vegetation Report. An application shall include a slope stabilization and a revegetation report which shall include:

1. Location and identification (by species) of existing vegetation.
  2. The vegetation to be removed and the method of disposal.
  3. The vegetation to be planted.
  4. Slope stabilization measures to be installed.
  5. Analysis of the environmental effect of such operations including effects on slope stability, soil erosion, water quality, fish and wildlife, and fire hazard.
  6. Topsoil stockpile areas will be designated.
  7. Solar orientation is recommended for review.
- c. Geologic Conditions Report. An application shall include the following information:
1. Definition of any zones of deformation with respect to active faults and other mass movements of soil and rock.
  2. Identification of anomalies of the terrain of characteristics of the geological materials which would have any potential impact upon the use of the site.
  3. Determination of ground water characteristics.
  4. Depth to bedrock and geological evaluation.
  5. Written recommendations for construction of proposed improvements to avoid impact of any potential geologic hazards.
- d. Grading and Drainage Report. The application for preliminary approval shall include a storm water management and erosion grading plan on the methods by which surface water, natural drainages, flooding, erosion and sedimentation loss will be accommodated during and after construction. The plan shall include the following information:
1. Grading Plan: The grading plan shall show present topography, tied to a land base survey, to include elevations, lines and grades including the location and depth of all proposed fills and cuts of the finished earth surfaces using a contour interval of two feet or less. Access or haul road location, treatment and maintenance requirements shall be included.  
  
Depending upon the slope and complexity of a development within the Sensitive Area Overlay Zone, the Planning Commission may require proposed lots and/or streets to be staked for field inspection before plat approval.
  2. Scale: An appropriate scale shall be used which most clearly presents the proposed action, generally 1" = 100' or larger.
  3. Cleared Area: The proposed area to be graded shall be clearly delineated on the plan and the area amount stated in square feet.

4. Calculations and Details: All calculations and proposed details used for design and construction (of debris basins, impoundments, diversions, dikes, waterways, drains, culverts and other water management or soil erosion control measures) shall be shown.

Calculations shall employ predictions of soil loss from sheet erosion using the Universal Soil Loss Equation or appropriate equivalent. Equations should include factors of:

1. rainfall intensity and energy
2. soil erodibility
3. land slope and length of slope or topography
4. condition of the soil surface and land management practices in use
5. surface cover; grass, woodland, crop, pavement, etc.

8. Final Approval.

- a. The final application filed with the Planning Commission shall be an application for final approval. Such application shall include the information required and shall be considered in the manner established by the provisions of the Ordinances of Sandy City as they pertain to the proposed development.
- b. Application for final approval shall include with the improvements drawings, spot elevations on all lot corners or contour grading plans of all lot frontages. The scale will be the same as the improvement drawings.

9. Construction, Grading and Contour Map and Issuance of Building Permits. There shall be no construction, development or grading upon the development site until final approval has been granted, as provided in this Section. Before the construction of single family dwelling units upon lots shall be allowed, a plot plan drawn to a scale (at least 1" = 10') for such lots shall be submitted to the Planning Commission or the designated representative, which plot plan shall show lot lines, existing and proposed contours at two foot intervals, location of proposed single family dwelling units, walks, driveways, patio areas. The plot plan will also show vegetative, drainage, and erosion controls and such plot plan shall be attached to the building permit.

**15-08-04 Flood Plain Overlay District**

**A. Findings**

1. Flood hazard areas of Sandy City are subject to periodic inundation which may result in loss of life and property, health hazards, disruptions of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
2. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazard which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately flood proofed, elevated, or otherwise protected from flood damage also contribute to flood loss.

**B. Purpose of Flood Plain Overlay District.** It is the purpose of this chapter to promote the public health,

safety, and general welfare, and to minimize public and private loss due to flood conditions to specific areas by provisions designed to:

1. Protect human life and health;
2. Minimize expenditure of public money for flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. Minimize prolonged business interruptions;
5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, and streets and bridges located in areas of special flood hazard;
6. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
7. Ensure that potential buyers are notified that property is in an area of special flood hazard; and
8. Ensure that those who occupy the areas of special flood hazards assume responsibility for their actions.

C. **Methods of Reducing Flood Losses.** In order to accomplish its purposes, this chapter includes methods and provisions for:

1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases of erosion, flood heights or velocities;
2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
4. Controlling filling, grading, dredging, and other development which may increase flood damage; and
5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

D. **Lands To Which This Ordinance Applies.** This chapter shall apply to all areas of special flood hazards within the jurisdiction of Sandy City, Utah.

E. **Basis For Establishing The Areas Of Special Flood Hazard.** The areas of special flood hazard are those identified by the Federal Emergency Management Agency in a scientific and engineering report entitled "Flood Insurance Study, Salt Lake County, Utah, Unincorporated Areas," September 30, 1994, with accompanying Flood Insurance Rate Maps, Flood Boundary-Floodway Maps and any revision thereto are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at Sandy City Hall, 10000 Centennial Parkway, Sandy City, Utah, 84070. When base flood elevation data has not been provided, the Community Development Director shall obtain, review, and reasonably utilize any base flood elevation data available from a Federal, State, or other source, in

order to administer this chapter.

- F. **Compliance.** No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this ordinance and other applicable regulations.
- G. **Abrogation And Greater Restrictions.** This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- H. **Interpretation.** In the interpretation and application of this ordinance, all provisions shall be:
1. Considered as minimum requirements;
  2. Liberally construed in favor of the governing body; and
  3. Deemed neither to limit nor repeal any other powers granted under State statutes.
- I. **Warning And Disclaimer Of Liability.** The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of Sandy City, any officer or employee thereof, or the Federal Emergency Management Agency for any flood damages that result from the reliance on this ordinance or any administrative decision lawfully made thereunder.
- J. **Relationship Of Floodplain Regulations To Zones.** The flood plain hazard regulations of this chapter shall be supplemental to, and not in lieu of, the applicable zoning provisions of the zone in which the land is located. Property located within said "areas of special flood hazard" shall be developed only in conformance with the provisions set forth herein. In cases of conflict between such zone classifications and the Floodplain Hazard Regulations, the most restrictive provisions shall govern. Permitted and conditional uses permitted in the "areas of special flood hazard" shall be developed only in conformance with the provisions set forth herein. All uses involving development as defined herein shall further meet the supplemental conditions and standards set forth in this chapter.
- K. **Special Flood Hazard Area Approval.** A conditional use permit shall be obtained before construction or development begins within an area of special flood hazard. Prior to issuance of a conditional use permit, the Planning Commission shall ensure that requirements of this chapter are met.

Application for such approval shall be made on forms furnished by the Community Development Department and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:

1. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
2. Elevation in relation to mean sea level to which any structure has been floodproofed;
3. Certification by a registered professional engineer or architect that the floodproofing methods for any

non-residential structure meet the floodproofing criteria in this Section, and,

4. Description of the extent to which any water course will be altered or relocated as a result of proposed development.

**L. Responsibility Of The Community Development Director.** The Sandy City Community Development Director shall be responsible to:

1. Review Applications

- a. Review all applications to determine if the proposed development is located in the Floodway. If located in the Floodway, assure that the encroachment provisions of this Section are met.
- b. Review all applications to determine that the requirements of this ordinance have been satisfied.
- c. Review all applications to determine that all necessary permits have been obtained from Federal, State, or local governmental agencies from which prior approval is required.
- d. When base flood elevation data has not been provided in accordance with the Section entitled BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the Community Development Director shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other source as criteria for requiring that new construction, substantial improvements, or other development in Zone A are administered in accordance with this Code.

2. Maintain Information File

- a. Obtain and record the actual elevation provided by the developer (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
- b. For all new or substantially improved floodproofed structures:
  1. Verify and record the actual elevation provided by the Developer (in relation to mean sea level) to which the structure has been floodproofed, and
  2. Maintain the floodproofing certifications required in by this Chapter.
- c. Maintain for public inspection all records pertaining to the provisions of this ordinance.

3. Verify Alteration of Watercourses - Verify that:

- a. A permit has been obtained from the Salt Lake County Division of Flood Control and Water Quality for any alteration of a watercourse identified as a Flood Control Facility in Title VII, Section 7-2-5, of the Ordinances of Salt Lake County or succeeding provision.
- b. A permit has been obtained from the State Engineer for alteration of a natural stream channel.
- c. Maintenance is provided for within the altered or relocated portion of said watercourse so the

flood-carrying capacity is not diminished. County-wide facilities are maintained by Salt Lake County Flood Control Services, City facilities are maintained by Sandy City.

- d. Notification has been made to cities adjacent to the watercourse and to the State of Utah, Division of Comprehensive Emergency Management, prior to any alteration or relocation of a watercourse and evidence of such notification has been submitted to the Federal Emergency Management Agency.

**M. Interpretation of FIRM Boundaries.** The Community Development Department Director shall make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in sub-section (N), below..

**N. Appeals**

1. The Board of Adjustment as established by the Development Code of Sandy City shall hear and decide all appeals and requests for variances from the requirements of this chapter as provided in Chapter 15-01. The following conditions shall be considered in addition to those provisions :
  - a. The danger that materials may be swept into other lands to the injury of others;
  - b. The danger to life and property due to flooding or erosion damage;
  - c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  - d. The importance of the services provided by the proposed facility to the community;
  - e. The necessity to the facility of a waterfront location, where applicable;
  - f. The availability of alternative locations, for the proposed use which are not subject to flooding or erosion damage;
  - g. The compatibility of the proposed use with the existing and anticipated development;
  - h. The relationship of the proposed use to the general plan and floodplain management program for that area;
  - i. The safety of access to the property in times of flood for ordinary and emergency vehicles;
  - j. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
  - k. The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets, and bridges.
2. Conditions for Variances
  - a. Generally, variances may be issued for new construction and substantial improvements to be

- erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (1-11) in Sub-Section (N)(1) above have been fully considered. As the lot size increases beyond the one-half acre, the technical justifications required for issuing the variance increases.
- b. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.
  - c. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
  - d. Variances shall only be issued upon a determination that the variance is the minimum necessary considering the flood hazard, to afford relief.
  - e. Variances shall only be issued upon:
    - 1. A showing of good and sufficient cause;
    - 2. A determination that failure to grant the variance would result in exceptional and undue hardship to the applicant; and
    - 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in this Section, or conflict with existing local laws or ordinances.
  - 3. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below 1 (one) foot above the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
  - 4. Sandy City shall maintain the records of all appeal actions and the Board of Adjustment and report any variances to the Federal Emergency Management Agency upon request.
- O. **Floodways.** Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
- 1. Encroachments, including fill, new construction, substantial improvements, and other developments are prohibited unless certification by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
  - 2. All new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this Section.
- P. **Development Standards within Flood Plain Overlay District.** In addition to the general development standards found elsewhere in this Code, in all areas of special flood hazards, the following standards are required:
- 1. Anchoring

- a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure and capable of resisting the hydrostatic and hydrodynamic loads.
  - b. All manufactured homes must be elevated and anchored to resist flotation, collapse or lateral movement and capable of resisting the hydrostatic and hydrodynamic loads. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces. Specific requirements may be:
    1. Over-the top ties be provided at each of the four corners of the manufactured home, with two additional ties per side at intermediate locations, with manufactured homes less than 50 feet long requiring one additional tie per side;
    2. Frame ties be provided at each corner of the home with five additional ties per side at intermediate points, with manufactured homes less than 50 feet long requiring four additional ties per side;
    3. All components of the anchoring system be capable of carrying a force of 4,800 pounds; and,
    4. Any additions to the manufactured home be similarly anchored.
2. Construction Materials and Methods
    - a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
    - b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
    - c. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
3. Utilities
    - a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
    - b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and
    - c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during the flooding.
4. Subdivision Proposals
    1. All subdivision proposals shall be consistent with the need to minimize flood damage;
    2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical,

- and water systems located and constructed to minimize flood damage;
3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
  4. Base flood elevation data shall be provided for subdivision proposals and other proposed development.
  5. Residential Construction. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to a minimum of 1 (one) foot above the base flood elevation.
  6. Non-residential Construction. New construction and substantial improvement of any commercial, industrial or other non-residential structure shall either have the lowest floor, including basement, elevated to a minimum of 1 (one) above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
    - a. Be floodproofed so that below 1 (one) foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water.
    - a. Have structural components capable of resisting hydrostatic and hydrodynamic loads and affects of buoyance; and
    - b. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the Community Development Director.
  7. Openings in Enclosures Below the Lowest Floor. For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
    - e. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
    - f. The bottom of all openings shall be no higher than one foot above grade;
    - g. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
  8. Manufactured Homes
    - a. Manufactured homes shall be anchored in accordance with this Section.
    - b. All manufactured homes or those to be substantially improved shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation and is securely anchored to an adequately anchored foundation system.
    - c. All manufactured homes or those to be substantially improved shall conform to the following requirements:
      1. Require that manufactured homes that are placed or substantially improved on a site (I)

outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

2. Require that manufactured homes to be placed or substantially improved on sites in existing manufactured home parks or subdivisions that are not subject to the provisions in (A) above be elevated so that either (I) the lowest floor of the manufactured home is at or above the base flood elevation, or (ii) the manufactured home chassis is supported by reinforced piers or other foundation elements that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
9. Recreational Vehicles. Require that recreational vehicles either (I) be on site for fewer than 180 consecutive days, (ii) be fully licensed and ready for highway use, or (iii) meet the permit requirements and elevation and anchoring requirements for resisting wind forces.

#### **Q. Jordan River Floodplain - Special Regulations**

1. Adoption of Printed Volume. Pursuant to the authority granted to the City by the laws of the State of Utah, the City hereby adopted by reference the provisions contained in an ordinance adopted and printed by Salt Lake County. The said ordinance is entitled Chapter 17.10 and was adopted by the Salt Lake County Commission on July 20, 1994 and is entitled "Jordan River Flood Channel Management Ordinance." Three copies of the said printed ordinance are on file with the Sandy City Recorder for information and inspection by the public.
2. Amendments To Printed Ordinance. The following amendments are hereby adopted with regard to the printed ordinance as set forth in Sub-Section (Q), above:
  - a. The provisions of Section 17.10.070.A are hereby amended to read as follows:

“In addition to all required Sandy City permits, licenses and approvals, before construction or development begins within any area of the Jordan River flood channel established by section 17.10.030, approval must be obtained from, and a special permit issued by, the county engineering division. Application for such approval and permit shall be made on forms finished by the engineering division and shall include, but not be limited to:”
  - b. The provisions of Section 17.10.080 are hereby amended to read as follows:

“Any applicant requesting approval for construction or development within any area of the Jordan River flood channel shall submit to the county engineering division and the Sandy City Engineer six copies of the following studies and reports:”
3. Additional Regulations. In addition to those requirements specifically outlined in Chapter 17.10 of the Salt Lake County Code, the following requirements shall be completed prior to development:
  - a. The Jordan River Basin has been identified and mapped by Salt Lake County as having a "High

Liquefaction Potential". Because of this special characteristic of this area, a site specific natural hazards study for residential subdivisions, multi-family residential structures, industrial and commercial buildings must be completed and accepted by the Sandy City Engineer before approval for required permits, licenses and other approvals is issued. The study shall address the soil conditions of the property to be developed, the natural hazards that exist, and proposed mitigation measures to mitigate, if possible, the natural hazards. If the natural hazard cannot be mitigated in a satisfactory manner, no approval shall be given by the Sandy City Engineer.

- b. All development shall comply with the recommendations as made by the "Jordan River District and Parkway Development Study", completed by Bingham Engineering and accepted by Sandy City in February 1995. Three copies of the said study are on file with the Sandy City Recorder for information and inspection by the public.

#### 15-08-05 Drinking Water Source Protection Ordinance

##### A. Title, Applicability and Authority.

1. Title. This ordinance shall be known as the Drinking Water Source Protection Ordinance. The provisions of this Ordinance shall be effective within the boundaries of Sandy City, and shall set prohibitions and restrictions to prevent contamination of the public drinking water supply in the City as a result of hazardous and toxic substances entering the groundwater, including wells not owned by the City. This ordinance shall be liberally construed to effect the purposes set forth herein.
2. Applicability. It shall be the responsibility of any person owning real property and/or owning or operating a business within the jurisdiction of the City to conform and comply with the applicable provisions contained in this Ordinance. Ignorance of this provision shall not excuse any violations of the provisions of this Ordinance.
3. Authority. Sandy City has the authority to adopt this Ordinance to facilitate compliance with drinking water source protection regulations pursuant to the Land Use and Development Act, Subsection 10-9-102, the Utah Administrative Code, Section R309-113, and other such authorities and provisions as in the statutory and common law of the State of Utah.

- B. **Purpose And Intent.** The purpose of this Ordinance is to protect, preserve, and maintain existing and potential public drinking water sources in order to safeguard the public health, safety and welfare of City residents and visitors. The intent of this Ordinance is to establish and designate drinking water source protection zones and groundwater recharge areas for all sources of public drinking water within City boundaries and jurisdiction. This Ordinance establishes criteria for regulating the storage, handling, use or production of hazardous or toxic substances within identified areas where groundwater is, or could be affected by the potential contaminant source. This shall be accomplished by the designation and regulation of property uses and conditions that may be maintained within such zones or areas. Unless otherwise specified, the provisions of this ordinance apply to new development and/or handling, movement, and storage of potentially hazardous materials.

The degree of protection afforded by this Ordinance is considered adequate for regulatory purposes. This Ordinance does not ensure that public drinking water sources will not be subject to accidental or intentional contamination, nor does it create liability on the part of the City, or an officer or employee thereof, for any damages to the public water supplies from reliance on this Ordinance nor any administrative order lawfully made thereunder.

A notice to cease or an exemption issued under this Ordinance shall not relieve the owner of the

obligation to comply with any other applicable federal, state, regional or local regulations, rule, ordinance or requirement, nor shall said notice or exemption relieve any owner of any liability for violation of such regulations, rules, ordinances, or requirements.

### C. Extent And Designation of Recharge Areas And Protection Zones

1. Recharge Area and Protection Zone Map. The extent of the recharge areas and the protection zones may be seen on the “Recharge Area and Protection Zone Map,” Exhibit 2. The “Recharge Area and Protection Zone Map” was completed April 7, 1998, and is incorporated and made a part of this ordinance. The recharge area boundary lines have been located along streets and or section lines for convenience of assessing which prohibition and restrictions apply to a specific property. This map shall be on file with Sandy City, and shall be maintained by the City and Public Water Systems whose groundwater resources lay within Sandy City boundaries and jurisdiction. Any amendments, additions, or deletions to this map shall be by the City and following written notice after approval by the Drinking Water Source Protection Review Committee. Notice shall be published at least 30 days prior to consideration by the committee.
2. Designation of Recharge Areas and Protection Zones. The following recharge areas and protection zones are hereby designated within Sandy City:
  - a. Primary Recharge Area, as determined by the USGS (see Exhibit 2).
  - b. Secondary Recharge, as determined by the USGS (see Exhibit 2).
  - c. Protection Zone 1 shall be the area within a 100-foot radius from the well or margin of the collection area.
  - d. Protection Zone 2 shall be area within a 250-day groundwater TOT to the margin of the collection area, the boundary of the aquifer(s) which supplies water to the groundwater source, or the groundwater divide, whichever is closer.
  - e. Protection Zone 3 shall be the area within a 3-year TOT to the margin of the collection area, the boundary of the aquifer(s) which supplies water to the groundwater source, or the groundwater divide, whichever is closer.
  - f. Protection Zone 4 shall be the area within a 15-year TOT to the margin of the collection area, the boundary of the aquifer(s) which supplies water to the groundwater source, or the groundwater divide, whichever is closer.
3. In determining the location of properties and facilities within the areas and zones depicted on the Drinking Water Source Protection Overlay Map, the following rules shall apply.
  - a. Property located wholly or partially in a recharge area or a protection zone on the overlay map shall be governed by the restrictions applicable to that recharge area or protection zone.
  - b. Properties located within more than one recharge area or protection zone as shown on the overlay map shall be governed by the restrictions applicable to the most restrictive protection zone.
4. Review of Recharge Area Protection Zone Map. The “Recharge Area and Protection Zone Map” shall be reviewed at least one time every 5 years or more frequently if determined appropriate by Sandy City. Failure to conduct this review shall not affect the validity of the existing approved map. The basis for updating the map may include, but is not limited to, the following:

- a. Changes in technical or scientific knowledge in the areas of geohydrology, hydraulics, and geology.
- b. Changes in wellfield configuration.
- c. Changes in pumping rates for the wellfield.
- d. Development of new wells, wellfields, and/or springs.
- e. Changes in water quality.

**D. Permitted Uses, Conditional Uses, And Prohibitions Within Recharge Areas And Protection Zones**

1. Releases. No person shall discharge, or permit the discharge of any regulated substances or petroleum products, whether treated or untreated, to soils, air, groundwater, or surface water in any recharge area or protection zone, that may have a deleterious effect upon the groundwater in Sandy City, unless the release is in compliance with federal, state, and local regulations.
2. Prohibitions and Restrictions. Table 1 is a summary matrix of Potential Contamination Sources and their prohibited, permitted, or if permitted, conditional use in the protection zones referenced in Section 15-08-05(F) of this Chapter.
3. Review of Development Plans. All development plans that lie within the primary recharge area shall be reviewed by a registered geologist who has demonstrated expertise in the assessment of recharge rates. Any development that will result in a loss of the beneficial use of groundwater or that may have an adverse or negative effect upon local groundwater quality shall be rejected. Plans that are rejected may be revised by the developer and resubmitted to Sandy City for subsequent review by a registered geologist. Developments that do not lie within either the primary or secondary recharge area may proceed with the development plan processing requirements of Sandy City.

**E. Management Strategies And Performance Standards.**

1. Toxic, Hazardous, and Other Materials Handling Regulations. The general classes of substances to be regulated under this Ordinance shall be those set forth in the Generic Regulated Substances List which is presented as Exhibit 1 of this Ordinance. The Regulated Substances shall include those set forth in the most current lists, as amended from time to time, entitled Identification and Listing of Hazardous Materials (40 CFR Part 261, Subpart D) and List of Extremely Hazardous Substances (40 CFR Part 355, Appendix A and B) and which are in a form that they are, all or in part, capable of entering the groundwater.

The use and storage of regulated substances in designated protection zones and recharge areas shall be allowed, provided that the quantities of these substances do not exceed the "Reportable Quantity" for each Regulated Substance, as designated in 40 CFR 302 (pursuant to Section 311 of the Clean Water Act). An applicant may be exempted from the provisions of this Section provided that he or she demonstrates to the Department and to the Utah Division of Drinking Water Quality that the regulated substances pose no hazard to groundwater.

2. Storage Containers. All regulated substances shall be stored in suitable containers to reduce the chance for the substances to be accidentally introduced into the environment. These storage containers shall be product-tight and, except where provided elsewhere in the Ordinance, shall be

provided with a means to control spillage (primary containment) and to contain or drain off spillage and fire-protection water discharged in the storage area (secondary containment).

Storage containers which are stored outside must be covered or mounted to prevent the accumulation of rain or other water on the top of the container, or the degradation of the top, sides or bottom of the container, in a manner that would lead to the reduction of the integrity of the container. Defective storage containers shall be removed from service for repair or disposal in accordance with local, state, and federal standards.

3. Secondary Containment. Where secondary containment is required, it shall be constructed of a material of sufficient structural integrity and composition to contain the required capacity of liquids and not be structurally weakened as a result of contact with the discharge of the regulated substance to be contained. The material shall be free of cracks, joints, gaps, or other imperfections which would allow leakage through the containment material.

The secondary containment system shall have sufficient capacity to contain (a) 10 percent of the volume of all containers and 100 percent of the volume of the largest single container, whichever is greater, plus (b) the design flow rate of the automatic fire extinguishing system (for 20 minutes) for the area or room in which the storage is located. If the storage area and/or containment area are open to rainfall, the secondary containment system must also accommodate the volume of a 24-hour rainfall as determined by a 25-year storm frequency. Liquid that accumulates in the secondary containment system shall be removed in as timely a manner as necessary to prevent overflow of the system. Nonhazardous liquids may be drained in accordance with applicable local regulations. If the collected material is a hazardous waste under Title 40 Part 261 of the Code of Federal Regulations, it must be managed as a hazardous waste in accordance with all applicable requirements of Parts 262 through 266 of that regulation.

Vacuum suction devices, absorbent scavenger materials or other devices approved by the Department, shall be present on-site or available to facilitate the removal or further containment of spilled regulated substances. Devices or materials shall be available in sufficient magnitude so as to at least control and collect the total quantity of regulated substances that the containment system is designed to contain. Emergency containers shall be present and of such capacity as to hold the total quantity of regulated substances plus absorbent material.

1. Regulated Substances Emergency Management Plan. An emergency plan shall be prepared and filed with the Department, the Fire Department, the Police Department and the Public Utilities Department indicating the procedures that will be followed in the event of the release of a regulated substance so as to control and collect all such spilled material in such a manner as to prevent it from discharging into any storm or sanitary drains or the ground. Facilities which have had, or appear to have had, unauthorized discharges to soil or groundwater shall be required by the Department to submit a Regulated Substances Management Plan for the facility. The written Plan will be used to demonstrate to the Department that the facility owner or operator understands the procedures and has the proper equipment to handle regulated substances within the guidelines of this Ordinance. The Plan should not be implemented without the approval of the Department.
2. Reporting of Spills. Any spill of a regulated substance in excess of the nonaggregate quantity thresholds established by the List of Hazardous Waste (40 CFR Part 261), Subpart D), 40 CFR Appendix VIII—Hazardous Constituents and EPA Designation Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA (40 CFR 302, effective July 3, 1986), shall be reported by telephone to the City and designated water utility within 1 hour of discovery of the spill. Cleanup shall commence immediately upon discovery of the spill. A full

written report shall be submitted to the City within 15 days of discovery of the spill.

3. Best Management Practices. Under the provisions of this Ordinance, all potential contamination sources within the City's boundaries, shall incorporate and utilize Best Management Practices (BMPs) in their operations. BMPs that reduce the potential for spills and leaks at a site to occur and enter groundwater shall be construed within the context of this Ordinance to include, but not be limited to, structural and nonstructural practices, conservation practices, and operation and maintenance procedures as specified by the Utah Department of Drinking Water Quality and the U.S. Environmental Protection Agency.
4. Underground Storage Tanks. Installation of any new underground storage tanks used to store regulated substances for either residential or nonresidential activities in recharge areas and protection zones designated under Sections 4.2 and 5 of this Ordinance, shall require a secondary containment system for the tank and associated underground piping, and an automatic leak detection system.

A permit from "Division of Environmental Remediation and Response" shall be required for the removal or closure of USTs. The permit shall require that leaking tanks be pumped dry and removed from the ground by a state-licensed company. If removal of the UST(s) is not feasible, the lines shall be disconnected and capped and the tank shall be filled with an inert substance such as washed sand.

Best management practices implementation is required for all underground storage tanks.

8. Septic Tank Systems. No person shall place, maintain, or operate onsite sewage disposal from a septic tank within the primary recharge area, Zone 1, Zone 2, or within 300 feet of any public street in which a public sewer is laid. Septic systems in Zones 3 and 4 shall comply with the Utah State Department of Health Care of Waste Disposal Regulations, Part IV and Part V.

Non residential activities which have septic tank systems shall have installed a 4-inch-diameter vertical pipe with a locked cap or locked top in the top of the septic tank. This monitoring pipe shall be located in a manner which will permit ready access by Department personnel to extract representative samples to check for improper/unauthorized disposal of regulated substances.

A septic holding tank that does not discharge into the soil would be preferred. The contents of a septic holding tank are removed, and can be treated or disposed of at an appropriate facility.

9. Sewage Collection, Transmission and Disposal. No person shall discharge treated or untreated sewage in any area not specifically designated for that purpose by the Department. The owner or operators of any wastewater treatment plant, sanitary sewer, force main, gravity sewer, or lateral shall notify the Department within 24 hours of discovering a break that may or does result in the leakage of sewage. Emergency telephone numbers will be prominently displayed on all sewage lift stations within Zones 1, 2, 3, and 4, and the primary recharging area.

All leaking sewage collection and transmission pipes shall be repaired or replaced. New sewage collection and transmission pipes shall be installed according to acceptable construction standards and shall have routine inspections during and after construction.

No person shall place, maintain, or operate a wastewater treatment plant within Zones 1 or 2.

10. General Stormwater Management. All future stormwater management systems to be constructed and implemented for facilities within the protection zones and recharge areas shall be permitted in accordance with applicable local, state, and federal laws and regulations.

The discharge of stormwater into drainage wells or open sinkholes shall be prohibited without some form of treatment. This treatment shall be applied to at least the first 0.5-inch of runoff from the area tributary to the well or open sinkhole.

The Clean Water and Stormwater Regulations require municipalities and industries to identify, monitor, and limit urban runoff that may enter rivers, thus potentially affecting groundwater quality.

11. Deicing Salt Storage and Application. Deicing salt shall be stored on an impermeable pad and shall be covered. Deicing salt application shall use Best Management Practices and shall evaluate substitute products and technologies.
12. Landfills. Expansion or creation of new landfills is prohibited in the primary recharge area and Zone 1 and Zone 2. Existing landfills in the Primary Recharge Area or in Protection Zone 1 shall be required to comply with the provisions of UAC R315-301-1 through 301-5. Landfills shall develop and implement a landfill monitoring program. The monitoring shall include the vadose zone and groundwater. If the monitoring detects contamination, the following corrective measures may be required:
  - a. Cover the landfill with suitable low-permeability materials and minimize the application of supplemental water to reduce infiltration of moisture.
  - b. Install groundwater containment and treatment actions, additional monitoring, and erosion controls as required.
13. Environmental Quality Monitoring. Facilities which have had, or appear to have had, unauthorized releases to soil or groundwater shall be required by the Department to monitor soil and groundwater in and adjacent to the facility. At the request of the Department, the facility will submit a monitoring plan for Department review. The plan shall be implemented with the approval of the Department. Facilities that undergo closure may be required to monitor soil and groundwater in and adjacent to the facility subject to closure. All costs associated with the closing and monitoring of the site will be paid for by the operator of the facility.

**F. Table - Land Use Matrix for Potential Contamination Sources.**

1. The following table identifies uses which have varying potentials to contaminate groundwater sources. These uses have been classified according to the risk of contamination in each protection zone as follows:

**Permitted Uses (P)**—The risk of contamination is considered relatively low in the specified zone if regulatory requirements and Best Management Practices are implemented and, therefore, the use is permitted.

**Conditional Uses (C)**—The risk of contamination is moderate in the specified zone. The use may be permitted only after Conditional Use review and approval by the Planning Commission. Approval is subject to implementation of Best Management Practices and compliance with other reasonable conditions as may be established by the Planning Commission. The Utah Division of Drinking Water Quality shall review all conditional use requests.

**Prohibited Uses (X)**—The risk of contamination is very high in the specified zone. The use is not permitted.

Stormwater: R-317-8-3.8(1)(a) Pretreatment: Contact Local Municipal Wastewater Plant  
 R-317-8-3.8(b)(c)+(d)

## A. Table of Uses

Potential Contamination Source	Protection Zone					Related Regulations	Best Management Practice(s)
	Primary Recharge	Secondary Recharge	Zone 1	Zone 2	Zones 3 and 4		
Abandoned wells	X	X	X	X	X	State Rule R655-4, 12.1 to 1.2 for requirements to abandon wells.	
Agricultural pesticide, herbicide, and fertilizer storage, use, filling, and mixing areas	C	C	X	C	C	FIFRA – 40 CFR 152-156, 157/RCRA Subtitle C/ Utah Pesticide Control Act	BMP – Department of Agriculture
Airport maintenance and fueling sites	C	C	X	C	C	Stormwater      UST	
Appliance repair	P	P	X	P	P	RCRA Subtitle C	
Auto operations and fleet vehicle maintenance facilities (commercial):	C	C	X	C	C		BMP-SL Co. Health
• Dealership maintenance departments						RCRA-C/UST/ Pretreatment	
• Tire							
• Auto body							
• Engine repair							
• Rust proofing							
• Oil and lube shops						Used Oil UAC R315-5	
• Vehicle rental with maintenance							
Beauty salons	C	P	X	C	P		
Boat building and refinishing	C	P	X	C	C	RCRA Subtitle C	
Car washes	C	C	X	C	C	Pretreatment	Contact Local Planning Department
Cemeteries, golf courses, parks, and plant nurseries	C	C	X	C	C	FIFRA	
Chemical reclamation facilities	C	C	X	C	C	RCRA Subtitle G	
Chemigation wells	C	C	X	X	C	UIC	
Concrete, asphalt, and tar companies	C	C	X	C	C		
Dairy farms and animal feed lots (more than 10 animal units)	C	P	X	X	P	UPDES, R-317-8	

Potential Contamination Source	Protection Zone					Related Regulations	Best Management Practice(s)
	Primary Recharge	Secondary Recharge	Zone 1	Zone 2	Zones 3 and 4		
Dry Cleaners (with onsite chemicals)	C	C	X	X	P	RCRA Subtitle C, Pretreatment/ SLCo. BMP	
Dry Cleaners (without onsite chemicals)	P	P	X	P	P		
Embalming Services	C	C	X	C	C	Pretreatment	
Farm Operations							
• Dump sites	X	C	X	C	C	Used Oil R315-15, Solid & Hazardous – RCRA Subtitle C	
• Maintenance garages	C	C	X	C	C	Used Oil, RCRA Subtitle C	
• Manure piles (<____ cubic feet)	C	C	X	C	P	UPDES, R-317-8, GW R-317-6	
Food processing, meat packing, and slaughter houses	C	C	X	X	P	UPDES, R-317-8, Pretreatment	
Fuel, oil, and heating oil distribution and storage facilities	X	C	X	C	C	Section 6.1 through 6.1.4 of this ordinance	
Furniture stripping, painting, and finishing businesses	C	C	X	C	C	RCRA, Subtitle C	
Gasoline service stations (including underground storage tanks)	C	C	X	C	C	Local zoning and land use regulations; UST guidelines	
Hospitals and medical, dental, and veterinary offices	C	C	X	C	C	Solid & Hazardous	
Industrial manufacturers of: chemicals, pesticides, herbicides, paper products, leather products, textiles, rubber, plastic, fiberglass, silicone, glass, pharmaceuticals, and electrical equipment, etc.	X	C	X	C	C	Sections 6.1 through 6.1.4 and Section 6.3 of this ordinance FIFRA + RCRA Subtitle C	
Industrial waste disposal/impoundment areas	X	C	X	C	C	GWR-317-6, RCRA Subtitle C	
Junk and salvage yards	X	C	X	C	C		SL Co. BMP
Landfills and transfer stations	X	C	X	C	P	UDSW, Solid Waste Rules R315-301-320; Section 6.8 of this ordinance; RCRA Subtitle D	
Laundromats	C	P	X	P	P	Pretreatment	
Machine shops, metal plating, heat treating, smelting, annealing, and descaling facilities	X	C	X	C	C	Pretreatment, RCRA Subtitle C	
Mining Operations							
• Radiological	C	C	X	P	P	UAC GW R317-6, UAC R313-25	
• Sand and gravel excavation and processing	C	P	X	P	P	Const UAC R317-1	

Potential Contamination Source	Protection Zone					Related Regulations	Best Management Practice(s)
	Primary Recharge	Secondary Recharge	Zone 1	Zone 2	Zones 3 and 4		
Municipal wastewater treatment plants	C	C	X	X	P	UDWQ, Design Requirements for Wastewater Collection, Treatment, and Disposal Systems,	
Photo processing and print shops	C	C	X	C	C	Pretreatment	
Railroad yards	C	P	X	P	P	Used Oil	
Residential pesticide, herbicide, and fertilizer storage, use, filling, and mixing areas	C	P	X	C	C		Follow manufacturer's directions for use and storage
Residential underground storage tanks	X	C	X	C	P	UAC R311-203, 205, 206	
RV waste disposal stations	C	C	X	X	P	UAC R392	
Salt and salt-sand piles	C	C	X	C	C	Section 6.7 of this ordinance	DEQ/UDOT BMP
Septic tank drain field systems	X	C	X	X	C	UDWQ, Individual Wastewater Disposal Systems, UAC, R317-501 through R317-513, State Department of Health, Code of Waste Disposal Regulations, Part IV and Part V	
Stormwater detention basin and snow storage sites	C	C	X	C	P		
Toxic chemical storage and oil pipelines	X	X	X	X	X	Section 6.1 through 6.1.4 of this ordinance	
Wood preservative treatment facilities	X	C	X	C	C		
UAC: Utah Administrative Code UDDWQ: Utah Division of Drinking Water Quality UDOGM: Utah Division of Oil, Gas, and Mining UDSW: Utah Division of Solid Waste RCRA: Resource Conservation and Recovery Act							

**G. Exclusions and Exemptions.** Exclusions and exemptions shall not pertain to Zones 1 and 2 within 100 feet from the wellfield in the recharge areas.

1. **Exclusions.** The following substances are not subject to the provisions of this Ordinance provided that these substances are handled, stored, and disposed of in a manner that does not result in an unauthorized release or cause contamination of the groundwater.
  - a. Required substances stored at residences that do not exceed 10 pounds or 5 gallons and used for personal, family, or household purposes.

- b. Commercial products limited to use at the site solely for office or janitorial purposes when stored in total quantities of less than 20 pounds, or 10 gallons.
  - c. Prepackaged consumer products available through retail sale to individuals for personal, family, or household use, that are properly stored.
  - d. Water-based latex paint.
  - e. Fertilizers and treated seed (except as noted in the Ordinance).
  - f. Pesticide products and materials intended for use in weed abatement, pest control, erosion control, soil amendment or similar applications when applied in accordance with manufacturer's instructions, label directions, and nationally recognized standards.
  - g. Compressed gases
  - h. Substances or mixtures which may pose a hazard but are labeled pursuant to the Federal Food, Drug, and Cosmetic Act.
2. Continuous Transit. The transportation of any Regulated Substance(s) through any protection zone or recharge area shall be allowed provided that the transporting vehicle is in continuous transit.
3. Vehicular and Lawn Maintenance Fuel and Lubricant Use. The use of any petroleum product solely as an operational fuel in the vehicle or lawn maintenance fuel tank or as a lubricant in such a vehicle shall be exempt from the provisions of the Ordinance. These spent products shall be properly disposed of in compliance with applicable federal, state, and local regulations.

#### **H.. Enforcement, Violation and Penalties**

1. Inspections. The Department shall be granted the right, under this Ordinance, to enforce the provisions of this Ordinance for Sandy City. An authorized officer of Sandy City or the Salt Lake City-County Department of Health has the right to conduct inspections of facilities to determine compliance with the Ordinance. The authorized officer or the Salt Lake City-County Department of health shall inform the Department and other City entities, as deemed appropriate, of the results of the inspection and whether violations were noted. The authorized officer of Sandy City and/or the Salt Lake City-County Department of health shall enforce the provisions of this ordinance without regard to whether the wells within Sandy City boundaries are owned by Sandy City. Noncompliance with the provisions of the Ordinance is a violation. If the facility is not complying with the requirements of the Ordinance, penalties (e.g., citations of noncompliance, orders to cease operations or administrative penalties) may be assessed. The Ordinance regulates businesses within the Protection Zones and Primary and Secondary Recharge Areas within the City.
2. Notice of Violations. Whenever it is determined that there is a violation of this Ordinance or the regulations promulgated pursuant hereto, the Notice of Violation shall:
- a. Be in writing;
  - b. Be dated and signed by the authorized City agent that made the inspection or determined the violation;
  - c. Specify the violation or violations;

- d. Provide a specific date that the violations will be corrected by;
- e. State that if the violation is not corrected by a specific date a hearing may be requested before the Department.

If a Potential Contaminant Source (PCS) is out of compliance with the provisions of the Ordinance, but does not pose an immediate threat to public health, then a written warning of violation may be issued within 30 days. The Person has the opportunity to show a good faith effort to correct an unintentional violation within a reasonable amount of time. A cease and desist order shall be issued by the Department if the PCS is found not to employ BMPs and there is an immediate threat to public health and safety or if the violation is not corrected within the time frame specified in a written warning previously issued to the PCS. In the event that the PCS fails to comply with a cease and desist order within the specified time period, the Department has the authority to file a request for the Department to initiate proceedings for issuance of penalties and other relief as necessary.

Any PCS or person found in violation of any provisions of the Ordinance will be served with a written notice stating the nature of the violation and providing a reasonable time frame for compliance. Violations of the provisions of the Ordinance constitute a misdemeanor, punishable as provided by law. In the event of a spill, leak or discharge of a regulated substance, the Department if he/she deems the activity to pose a real and present danger of contaminating surface or groundwater which would normally enter the public water supply, the Department has the authority under this Ordinance to cause cessation of said activity or use of regulated substance, require administrative controls to mitigate said danger and/or cause the provision of pollution control and abatement activities. A facility is in violation of the Ordinance, if use of regulated substances in a Protection Zone or Primary or Secondary Recharge Area exceeds 20 gallons or 160 pounds at any time. The total use of regulated substances may not exceed 50 gallons or 400 pounds in any 12-month period.

- 3. Appeals. Persons cited under the enforcement provisions of sub-sections A and B above shall be afforded a process for appealing the ruling of the Department. If the appeal pertains to a written warning of violation requesting the PCS to correct an unintentional violation in a reasonable amount of time, the PCS can submit to the Department a written statement demonstrating compliance or explaining a process for coming into compliance. This written response if required no later than 30 days from the date of issuance of the warning.

If the appeal pertains to a cease and desist order issued by the Department, the PCS can submit a written appeal response no later than 10 days from the date of issuance of the order. The written appeal shall contain:

- a. Documentation of compliance, or
- b. Response to specific violations cited in the cease and desist order and the remedial actions planned to bring the facility into compliance, and
- c. Schedule for compliance

Upon receipt of the written appeal, the Department shall be required to review the appeal within 10 days of its receipt and respond to the PCS. If the Department determines that the written response from the PCS is adequate and noncompliance issues are addressed, the PCS will be notified by mail and no further action is required. If the Department determines that the appeals response is

inadequate, the PCS may request a hearing before the Department. This hearing shall be held within 30 days of receiving the cease and desist order and shall remain in effect until the hearing is conducted.

**I. Other.**

1. Abrogation and Greater Restrictions. This Ordinance is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this Ordinance and other restrictions, including land use codes or development regulations conflict or overlap, whichever imposes the most stringent restrictions shall prevail.
2. Disputes. Disputes arising from the delineation of DWSP Zones and Primary and Secondary Recharge Areas shall be directed to the Drinking Water Source Protection Review Committee to review specific detailed delineation maps showing the boundaries. The boundaries have been defined, for ease of implementation of the Ordinance, according to major City streets.
3. Review of the Ordinance. The City, the Drinking Water Source Protection Review Committee, and all water utilities whose wells and/or springs lay within the City boundaries shall review the provisions of this Ordinance at least once every 5 years, or more frequently if determined appropriate by the City, to determine its applicability and may incorporate changes as deemed appropriate.

**J. Liability.** Any person subject to regulation under this Ordinance shall be liable with respect to regulated substances emanating on or from the Person's property for all cost of removal or remedial action incurred by the City and/or Salt Lake City-County Department of Health and for damages for injury to, destruction of, or loss of natural resources, including the reasonable cost of assessing such injury, destruction, or loss from the release or threatened release of a regulated substance as defined by this Ordinance. Such removal or remedial action by the City and/or Salt Lake City-County Department of Health may include, but is not limited to, the prevention of further contamination of groundwater, monitoring, containment, and cleanup or disposal of regulated substances resulting from spilling, leaking, pumping, pouring, emitting, or dumping of any regulated substance or material which creates an emergency hazardous, or is expected to create, an emergency hazardous situation.

**K. Administration.** The policies and procedures for administration of any Protection Zone or Primary and Secondary Recharge Area established under this Ordinance, including without limitation those applicable to nonconforming uses, exceptions, enforcement and penalties, shall be the same as provided in any existing zoning ordinance in the City, as the same is presently enacted or may from time to time be amended.

**L. Exhibit 1. Generic Regulated Substance List**

Acid and basic cleaning solutions  
Antifreeze and coolants  
Animal dips  
Arsenic and arsenic compounds  
Battery acids  
Bleaches and peroxide  
Brake and transmission fluid  
Brine solution  
Casting and foundry chemicals  
Caulking agents and sealants  
Cleaning solvents

Corrosion and rust preventatives  
Cutting fluids  
Degreasing solvents  
Disinfectants  
Dyes  
Electroplating solutions  
Engraving and etching solutions  
Explosives  
Fertilizers  
Fire extinguishing chemicals  
Food processing wasters  
Formaldehyde  
Fuels and additives  
Glues, adhesives and resins  
Greases  
Hydraulic fluid  
Indicators  
Industrial and commercial janitorial supplies  
Industrial sludges and stillbottoms  
Inks, printing, and photocopying chemicals  
Laboratory chemicals  
Liquid storage batteries  
Medical, pharmaceutical, dental, veterinary, and hospital solutions  
Mercury and mercury compounds  
Metal finishing solutions  
Oils  
Paints, primers, thinners, dyes, stains, wood preservatives, varnishing and cleaning compounds  
Painting solvents  
Pesticides and herbicides  
Photo development chemicals  
Plastic resins, plasticizers and catalysts  
Poisons  
Polishes  
Polychlorinated biphenyls (PCBs)  
Pool chemicals  
Processed dust and particulates  
Radioactive sources  
Reagents and standards  
Refrigerants  
Roofing chemicals and sealers  
Sanitizers, disinfectants, bactericides, and algacides  
Soaps, detergents and surfactants  
Solders and fluxes  
Stripping compounds  
Tanning industry chemicals  
Transformer and capacitor oils and fluids  
Wastewater  
Water and wastewater treatment chemicals

**M. Exhibit 2. (Map of Primary and Secondary Recharge Areas).** Full-sized, detailed map on file with the Public Utilities Department.

